

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

The specification has been amended to change the phrase "atmospheric pressure chamber" to --reservoir pressure chamber-- to address the concern raised on page two of the Official Action. Accordingly, withdrawal of the claim rejection based on the first paragraph of 35 U.S.C. § 112 is respectfully requested.

The Official Action sets forth a rejection of original Claims 1 and 2 based on the disclosure contained in U.S. Patent No. 6,058,705 to *Schunck* in view of the disclosures contained in U.S. Patent No. 6,775,979 to *Drott et al.* and U.S. Application Publication No. 2002/0101114 to *Kamiya et al.* That rejection is respectfully traversed for at least the following reasons.

Original Claims 1 and 2 have been canceled and replaced with new Claims 3 and 4. Independent Claim 3 is directed to a hydraulic brake apparatus comprising a tandem brake master cylinder, a separation valve, a pressure control valve unit, and a stroke simulator mechanism. The tandem brake master cylinder comprises a cylinder body, a rod piston movable in response to a brake-operating member and a floating piston movable in response to the rod piston. The separation valve is provided in the hydraulic brake circuit and is adapted to establish and shut off communication between the tandem brake master cylinder and the brake wheel cylinder. The pressure control valve unit controls fluid pressure to be supplied from the external fluid-pressure supply source to the brake wheel cylinder while the separation valve is in a shutoff condition. The stroke simulator mechanism allows the idle stroke of the rod piston and the idle stroke of the floating piston, while the

separation valve is in the shutoff condition, to ensure the stroke of the brake-operating member in accordance with the input load to the brake-operating member.

Schunck discloses a hydraulic brake system which includes a master cylinder

26. As the Official Action correctly notes, *Schunck* lacks a disclosure of an orifice provided in a passage as originally claimed.

The Official Action relies upon *Drott et al.* for its disclosure of an orifice in the area of reference numeral 13. However, such orifice is not the same as the orifice at issue here. To better highlight differences between the orifice recited in original Claim 1 and the disclosure in *Drott et al.*, new Claim 3 has been worded, relative to original Claim 1, to set forth additional details relating to the rod piston and the floating piston to provide a more clear recitation of what constitutes the first pressure chamber and the first reservoir pressure chamber, and to also recite the second pressure chamber and the second reservoir pressure chamber. Thus, Claim 3 recites that the rod piston defines within the cylinder body a first reservoir pressure chamber in communication with a reservoir and a first pressure chamber in communication with a hydraulic brake circuit connecting the tandem brake master cylinder and adapted to be connected to or separated from the first reservoir pressure chamber. In addition, Claim 3 recites that the floating piston is movable in response to the rod piston and defines within the cylinder body a second reservoir pressure chamber in communication with the reservoir and a second pressure chamber in communication with the hydraulic brake circuit and adapted to be connected to or separated from the second reservoir pressure chamber. Claim 3 then goes on to recite that the first orifice is provided in a first passage which

establishes, during the idle stroke of the rod piston, communication between the first pressure chamber and the first reservoir pressure chamber.

Independent Claim 3 has also been amended to recite a further distinction relating to the relationship between the lengths of the idle strokes of the rod piston and the floating piston. That is, Claim 3 defines that the length of the idle stroke of the rod piston is set to be longer than the length of the idle stroke of the floating piston.

- With the construction as claimed, during a relatively abrupt operation of the brake-operating member, the throttle effect provided by the first orifice can work relatively directly to enhance the rigid feel of the brake-operating member to thus improve the operation feeling at the time of relatively abrupt operation of the brake-operating member. In addition, with the claimed relationship of the relative lengths of the idle stroke of the rod piston and the floating piston, it is possible over a long range of a relatively abrupt stroke of the brake-operating member to improve the operational feeling during such operation of the brake-operating member.

The orifice that is said to be located near reference numeral 13 in *Drott et al.* is not an orifice provided in a first passage to establish, during the idle stroke of a rod piston, communication between a first pressure chamber (defined by the rod piston as set forth in Claim 3) and the first reservoir pressure chamber (defined by the floating piston as set forth in Claim 3). In addition, *Drott et al.*, as well as *Schunck*, does not disclose the claimed relationship between the length of the idle stroke of a rod piston and the length of the idle stroke of a floating piston as also set forth in independent Claim 3.

Further, the disclosure contained in *Kamiya et al.* does not make up for the deficiencies pointed out above with respect to the disclosures contained in *Schunck et al.* and *Drott et al.* Thus, a combination of the disclosures contained in *Schunck*, *Drott et al.* and *Kamiya et al.* would not have led one to construct a hydraulic brake apparatus having the claimed combination of features recited independent Claim 3. Accordingly, the claimed hydraulic brake apparatus recited in Claim 3, and dependent Claim 4, is patentably distinguishable over the cited documents.

Early and favorable action with respect to this application is respectfully requested.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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